Reply to Notice dated March 18, 2009

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An isolated antigenic composition, which composition

comprises comprising at least one antigen, wherein said at least one antigen comprises at least

part of a protein of Streptococcus equi subsp equi, and said at least part of said protein comprises

at least one antigenic epitope or antigenic determinant of Streptococcus equi, and wherein said

protein is comprised of EAG comprising an amino acid sequence according to SEQ ID NO: 1, or

an analog thereof

(i) a first antigen, which first antigen comprises at least part of an isolated protein of

Streptococcus equi subsp equi, which protein is designated EAG and which at least

part of said protein comprises at least one antigenic epitope or antigenic determinant

of Streptococcus equi, and

which first antigen comprises at least the N-terminal amino acid sequence of EAG,

which comprises the amino acid sequence of SEQ ID NO:1,

(ii) a second antigen, which second antigen comprises at least part of an isolated

protein of Streptococcus equi, which protein is designated SEC and comprises the

amino acid sequence of SEQ ID NO:4, and which at least part of said protein

comprises at least one antigenic epitope or antigenic determinant of Streptococcus

equi, and

which second antigen comprises at least the N-terminal collagen-binding part of SEC

which comprises the amino acid sequence of SEQ ID NO:22, and

(iii) a third antigen, which third antigen comprises at least part of an isolated protein

of Streptococcus equi, which protein is designated Sc1C and comprises the amino

acid sequence of SEQ ID NO:23 and which at least part of said protein comprises at

least one antigenic epitope or antigenic determinant of Streptococcus equi, and

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which third antigen comprises at least the immunogenic fragment of Sc1C, which fragment comprises the amino acid sequence of SEQ ID NO:27.

2. (Withdrawn, Currently Amended) The <u>isolated</u> antigenic composition of claim 1, which comprises at least one further antigen that comprises at least part of a fibronectin binding protein of *Streptococcus equi*, said at least part of said protein comprising at least one antigenic epitope or antigenic determinant of *Streptococcus equi*, and wherein said protein is selected from the group consisting of FNZ comprising an amino acid sequence according to SEQ ID NO: 2 and SFS comprising an amino acid sequence according to SEQ ID NO: 3, or an analog thereof

wherein said antigens are comprised of the N-terminal part of EAG in accordance with claim 1 (i), the collagen-binding part of SEC in accordance with claim 1 (ii), which collagen binding part comprises the amino acid sequence of SEQ ID NO:22 and the immunogenic fragment of SclC in accordance with claim 1 (iii), which fragment is designated SCL Cl and provokes production of antibodies, and which fragment comprises the amino acid sequence of SEQ ID NO:27.

3. (Currently Amended) The <u>isolated</u> antigenic composition of claim 1, which comprises at least one further antigen that comprises at least part of a protein of *Streptococcus equi* and said at least part of said protein comprises an antigenic epitope or an antigenic determinant of *Streptococcus equi*, and wherein said protein is comprised of SEC comprising an amino acid sequence according to SEQ ID NO: 4, or an analog thereof

wherein said collagen binding part of SEC comprises the amino acid sequence of SEQ ID NO:20 and is designated SEC2.16.

4. (Withdrawn, Currently Amended) The <u>isolated</u> antigenic composition of claim 1, which comprises an N-terminal fragment of a protein selected from the group consisting of EAG and FNZ

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wherein said third antigen is comprised of SCL Cl comprising the amino acid sequence of

SEQ ID NO: 27.

5. (Withdrawn, Currently Amended) The isolated antigenic composition of claim [[3]] 1,

wherein said antigens are comprised of at least part of EAG, FNZ, SFS, and SEC, optionally,

said at least part of EAG and FNZ being an N terminal part thereof, said at least part of SFS

being a C-terminal part of SFS, and said at least part of SEC being a collagen-binding part of

SEC

which (iv) comprises at least one further antigen that comprises an isolated protein

Streptococcus equi or a part of said protein, which part comprises at least one antigenic epitope

or antigenic determinant of Streptococcus equi, and which protein is selected from the group

consisting of (a) an isolated protein designated FNZ which comprises the amino acid sequence of

SEQ ID NO:2 or an N-terminal fibronectin-binding part of FNZ comprising the amino acid

sequence of SEQ ID NO:13, and (b) an isolated protein designated SFS which comprises the

amino acid sequence of SEQ ID NO: 3 or a part of SFS comprising the amino acid sequence of

SEQ ID NO:10.

6. (Cancelled)

7. (Withdrawn, Currently Amended) A vaccine composition, which comprises the

antigenic composition of any one of claims 1-5 claim 1 as an immunizing component, and a

pharmaceutically acceptable carrier.

3. (Withdrawn) The vaccine composition of claim 7, which further comprises an

adjuvant.

9. (Cancelled)

10. (Withdrawn) The vaccine composition of claim 7, which is provided in a

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physiologically administrable form and suitably is administrable by subcutaneous or intranasal

inoculation.

11. (Cancelled)

12. (Withdrawn, Currently Amended) A method for producing preparation of a vaccine

an antigen of an antigenic composition of any one of claims 1-5 for protecting non-human

mammals against infection of Streptococcus equi, which vaccine composition contains the

antigenic composition of claim 1, which antigenic composition comprises antigens, which

antigens are prepared in accordance with a method comprising the following steps: which

method-comprises (a) providing a DNA fragment encoding said antigen and introducing said

fragment into an expression vector; (b) introducing said vector, which contains said DNA

fragment, into a compatible host cell; (c) culturing said host cell provided in step (b) under

conditions required for expression of the product antigen encoded by said DNA fragment; and

(d) isolating the expressed product antigen from the cultured host cell, and, optionally, (e)

purifying the isolated product from step (d) by affinity chromatography or other chromatographic

methods known in the art and which method comprises mixing said antigenic composition with a

pharmaceutically acceptable carrier.

13. (Withdrawn, Currently Amended) A method for preparation of a vaccine, which

vaccine contains as immunizing component, an antigenic composition of any one of claims 1-5

claim 1, said method comprising mixing said antigenic composition and a pharmaceutically

acceptable carrier.

14. (Cancelled)

15. (Withdrawn, Currently Amended) A method for the production of an antiserum, said

method comprising administering an antigenic preparation of any one of claims 1-5 claim 1 to

an animal host to produce antibodies in said animal host and recovering antiserum containing

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said antibodies produced in said animal host.

16. (Withdrawn) A method of prophylactic or therapeutic treatment of S. equi infection in

non-human mammals, suitably horses, comprising administering to said mammal an

immunologically effective amount of a vaccine of claim 7.

17. (Withdrawn) A method for protecting horses against Streptococcus equi infection,

which comprises inoculating a horse subcutaneously or intranasally with a vaccine of claim 7 to

induce an immune response against Streptococcus equi in said horse.

18. (Withdrawn) The method of claim 17, wherein an immune response in the form of

IgG and/or IgA and/or IgM antibodies in the nasopharyngeal mucus is induced in said horse.

19. (Withdrawn, Currently Amended) Monoclonal antibodies against antigen(s) of the

composition of any of claims-1-4 claim 1.

20. (Cancelled)

21. (Withdrawn) The vaccine composition of claim 7, which further comprises an

adjuvant.

22. (Withdrawn) A method of prophylactic or therapeutic treatment of S. equi infection

in non-human mammals, comprising administering to said mammal an immunologically

effective amount of an antiserum produced according to claim 15.

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